

The Missouri Mathematics Pathways Taskforce (MMPT)

The Missouri Department of Higher Education hereby charges the Missouri Mathematics Pathways Taskforce to explore options and make recommendations that will, one, increase significantly students' success rates in mathematics gateway courses without compromising the integrity of the mathematics; and two, increase significantly the percentage of students completing degree programs.

The Taskforce should consider the following in pursuit of the charge:

- 1. How effective are college algebra and other entry-level courses as:
 - a. a gateway to the major in mathematics?
 - b. a gateway to other mathematics-intensive majors?
 - c. as a supportive course for majors that are not mathematics-intensive?
- 2. Are there alternative entry-level mathematics courses that might work in Missouri?
- 3. How can mathematics departments work with other departments on the alignment of mathematics courses to programs of study?
- 4. How seamlessly do existing mathematics courses transfer between institutions?

The final phase of the Taskforce's work will be implementing its recommendations. This work will include:

- 1. Developing strategies to familiarize departments, instructors, and advisors with alternative approaches to entry-level courses, inclusive of content, instruction, and delivery mechanisms.
- 2. Communicating information among chairpersons about best practices and about ways to move promising efforts to scale.
- 3. Communicating the Taskforce's recommendations to relevant professional associations, state decision-makers, university and college leaders, and other relevant stakeholders.
- 4. Collecting and analyzing data to measure effectiveness of existing and new entry-level mathematics courses, including dual enrollment courses taught in the high schools. Establish calendars for monitoring student success over time and for the periodic review of policies and practices.
- 5. Exploring ways to improve alignment with K-12, specifically to ensure that college-level and developmental-level mathematics courses reflect the secondary-level CCSSM and to ensure that dual enrollment courses in any setting are equivalent to taking the course on a college campus.